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Suidasia Mite Found from the Human Ear

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ABSTRACT

A small mite population was found around and on the tympanum of a married woman. Mite specimens of the adult female, adult male, nymph, and egg were seen in the sample. Slide specimens were made from only the adult mite specimens which were in good shape, and these are described. The mite was identified as *Suidasia pontifica* Oudemans. However, the supra coxal seta of this mite branches from its base, and both branches are pilose. This character was not mentioned by Fain and Philips (1978).

Key words: ear, human, mite

Introduction

A married woman complained of a buzz which frequently occurred in her ear. She went to the Taipei Municipal Chung Hsin Hospital for diagnosis. During

Fig. 1. Mites on the tympanum. Several large individuals are indicated by arrows

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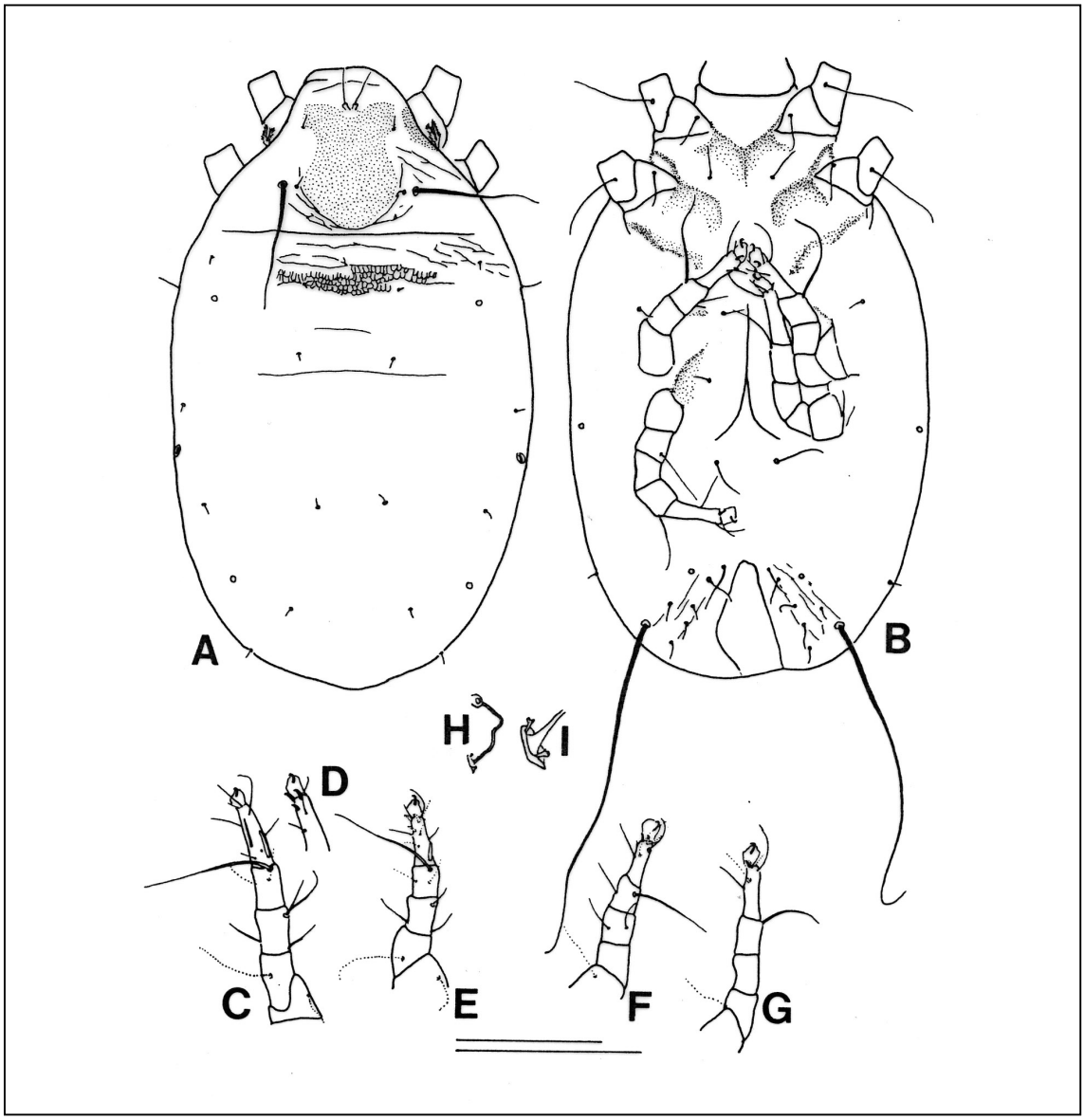

Fig. 2. *Suidasia pontifica* female, only a small part of the cuticular wrinkles are drawn. A. Dorsal view; B. ventral view; C. leg I, dorsal lateral; D. tarsus I, ventral view of the distal part; E-G. legs II-IV; H. receptaculum seminis; I. magnification of the basal disc of the sacculus. Longer bar represents 50 μ m in I. Shorter bar represents 100 μ m in the other figures.

inspection with an otoscope, the second author found a mite population inside the ear canal of the patient, around and on the tympanum (Fig. 1). The mite specimens were finally sent to the first author for identification. It was identified as *Suidasia pontifica* Oudemans, and is described herein. All measurements are in microns. The range is provided when available in parenthesis after the mean. Setal nomenclature of Fain (1963) is followed.

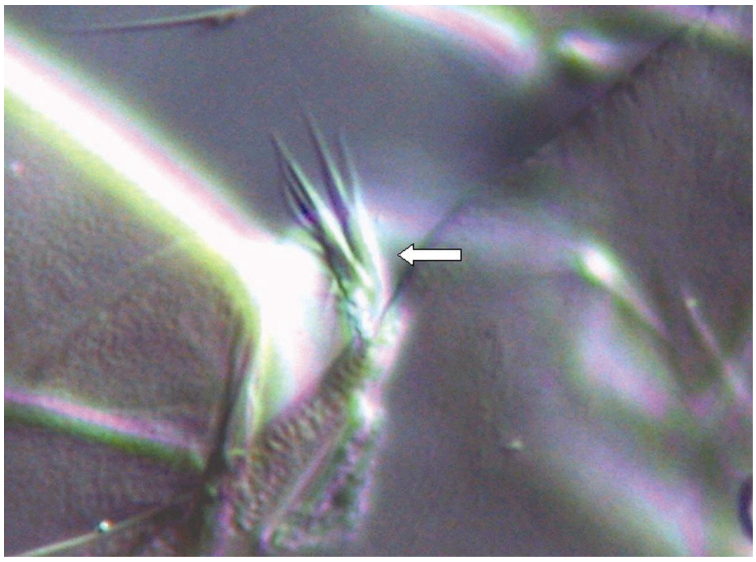

Fig. 3. Bifurcated pilose supra coax seta.

Description

Female (measured 3 individuals) (Fig. 2): Idiosoma 401.1 (393.3-406.7) long, 248.9 (233.3-263.3) wide. Length of propodosomal setae: vi 17.3 (6.67-24.4), ve 13.3 (8.9-22.2), sc i 6.4 (5.6-6.7), sc e 84.4 (77.8-88.9). Supra coxal seta pilose and bifurcated from its base (Fig. 3), 19.4 (16.7-20.0). Length of hysterosomal setae: h 21.1 (20-22.2), hv 17.4 (13.3-22.2), d1 4.4 (2.2-6.7), d2 5.2 (4.4-6.7), d3 5.0 (4.4-6.7), d4 5.3 (4.4-6.7), d5 5.9 (4.4-6.7), l1 5.6 (4.4-6.7), l2 5.0 (4.4-6.7), l3 7.6 (4.4-8.9), l4 11.1 (8.9-13.3), and l5 229.4 (204.4-246.7). Length of anal setae: a1 6.7 (4.4-8.9), a2 23.8 (21.1-26.7), a3 10.0 (8.9-11.1), a4 10.0 (6.7-13.3), a5 8.9 (6.7-11.1), a6 8.4 (6.7-11.1).

Male (measured 1 individual)(Fig. 4): Idiosoma 356.7 long and 223.3 wide. Length of propodosomal setae: vi 26.7, ve 10.0, sc i 6.7, sc e 87.8. Supra coxal setae. 13.9. Length of hysterosomal setae: h 13.3, hv 15.6, d1 6.1, d2 6.7, d3 4.2, d4 6.7, d5 8.9, l1 4.4, l2 7.8, l3 7.8, l4 16.1, l5 166.7, a1 8.9, a2 13.3, a3 14.4.

Remarks

S. pontifica is characterized by the large anal sucker of the adult male. However, we noticed characters that were not mentioned by Fain and Philips (1978). The supra coxal seta in the specimens we obtained, in both the adult female and adult male, branches from the base, and the two branches are both pilose. In addition, seta cG on genu I has two small serrations approximately at the middle of its length. Grandjean's organ in our specimens was not observable. We were therefore unable to describe it.

Discussion

Mites have been found in the external auditory canal of humans. Cho *et al.* (1999) reported *Sancassania berlesei* (Michael) from a man. Our case involved *Suidasia pontifica* from a woman. Both

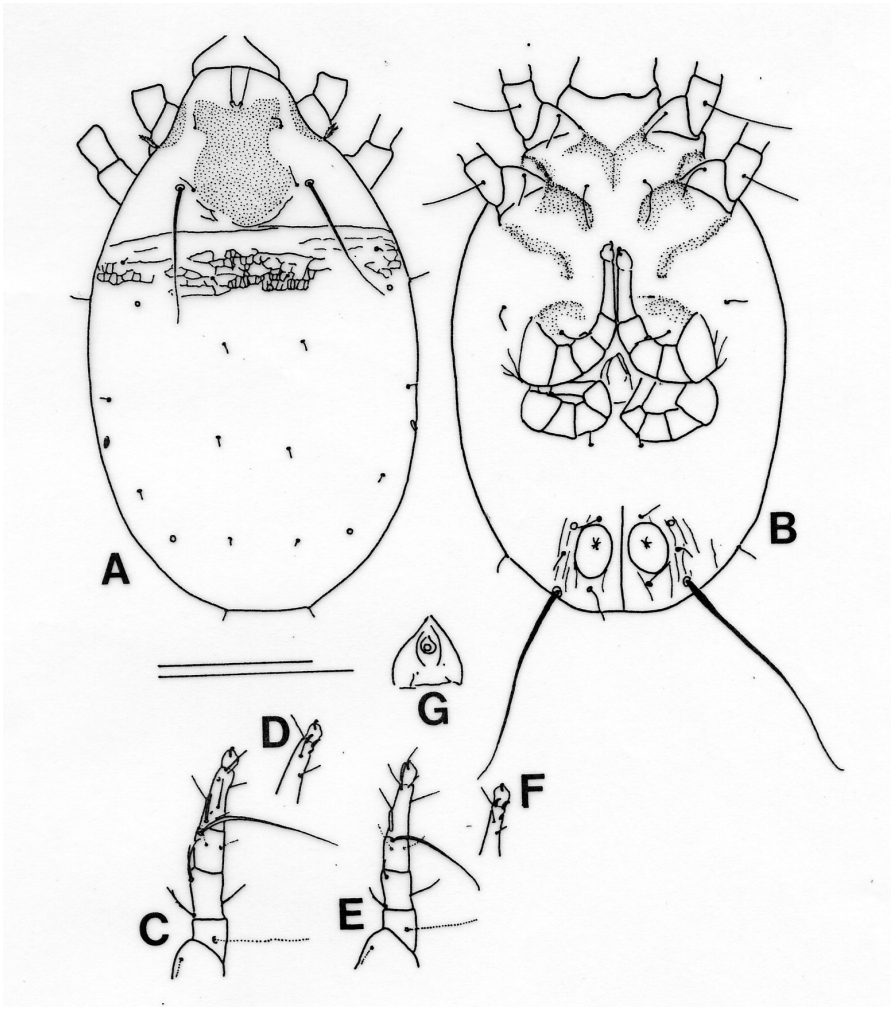

Fig. 4. Suidasia pontifica male, only a small part of the cuticular wrinkles are drawn. A. Dorsal view; B. ventral view; C. leg I, dorsal lateral; D. tarsus I, ventral view of the distal part; E. leg II, dorsal lateral; F. tarsus II, ventral view of the distal part; G. aedeagus. Longer bar represents 50 μm for the aedaegus. Shorter bar represents 100 μm for the other figures.

mites are, generally, pests of stored products. *Suidasia* mites have been reported to infest the human intestine (Martinez Maranon and Hoffmann, 1976) and pulmonary system (Sun *et al*., 1990), or to cause dermatitis (Mumcuoglu, 1976; Samsinak *et al*., 1989). This is the first time that a Suidasia mite has been reported from the auditory canal. Cho *et al*. estimated that more than three generations of *Sancassania berlesei* had lived in the man's ear. In our case, from the sample brought to the first author, three adult females, one male, several nymphs, and many eggs were seen under a binocular microscope. It is reasonable to conclude that the mite had propagated in the patient's ear. However, we still wonder what the mites on tympanum were feeding.

Acknowledgments

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發現於人耳中的皺皮蟎

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摘 要

在不時爲耳鳴困擾的病患耳中鼓膜處發現有蟎的族群，樣品中找到雌成蟎、雄成蟎、若蟎及卵。僅有成蟎做得好的玻片標本，而描繪於本文。此蟎經鑑定爲洗出後發現爲 *Suidasia pontifica* Oudemans。然而它的 supra coxal setae 自基部處即分成二支，二個分支皆呈多毛狀(pilose)，此一特性未曾被 Fain and Philips (1978)提及。

關鍵詞：耳朵、人類、蟎